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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,232

12/27/2004

Ya'akov Greenshpan

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02/17/2009

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EXAMINER

MUSSELMAN, TIMOTHY A

ART UNIT

PAPER NUMBER

3715

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	<b>Application No.</b> 10/519,232	<b>Applicant(s)</b> GREENSHPAN ET AL.	
	<b>Examiner</b> TIMOTHY MUSSELMAN	<b>Art Unit</b> 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |



## DETAILED ACTION

### *Status of Claims*

In response to applicant's submission dated 10/27/2008, claims 1-52 are currently pending in this application. New claims 48-52 have been added.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the relevant portion of 35 U.S.C. 102 that forms the basis for the rejections made in this section of the office action;

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

**Claims 1-7, 10-15, 18-20, 23-27, 30-49, and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Barton (US 6,746,247).**

**Regarding claims 1, 14, and 18,** Barton discloses a method for teaching a subject a control process in a task, wherein the task is decomposed into a plurality of cognitive skill related to the control process. See col. 4: 1-11 and col. 5: 23-33. Barton further discloses wherein a trainer is constructed (a song) by computer software programs. See col. 5: 3-15. Listening to a song does not require fidelity to the task, and the training of timing is an executive process in that it teaches reaction, reaction inhibition, etc.

**Regarding claim 2,** using the song to aid training as described by Barton in col. 4: 11-13 does not require action consistent with the sport the user is training for.

**Regarding claims 3-5, 7, and 15,** Barton discloses wherein the system breaks the tasks into a series of cognitive skills and actions related thereto. See col. 5: 33-40 (a cognitive skill, for



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example, could be related to eye hand coordination, which could be related to the action of batting, which is related to the action of drawing the bat back, etc.).

**Regarding claim 6**, Barton discloses in col. 4: 11-13 wherein the user listens to a song to develop timing. The cognitive development of timing does not require physical fidelity to the task.

**Regarding claims 10-11 and 27**, Barton discloses wherein the training song is developed based upon a series of actions and combinations of actions. See col. 5: 23-33.

**Regarding claim 12**, Barton discloses wherein the user utilizes input and output devices in conjunction with the trainer. See col. 4: 38-55.

**Regarding claim 13**, Barton discloses wherein the actions the trainer is based upon are maintained in a profile. See col. 4: 11-13.

**Regarding claim 19-20 and 30-32**, Barton discloses wherein the training is related to a ball handling sport activity. See fig. 5 and col. 5: 23-33.

**Regarding claims 23 and 45**, Barton discloses wherein the system task analysis is partly automatic. See col. 4: 38-50.

**Regarding claim 24**, Barton discloses wherein the system develops a training plan for the user. See col. 4: 1-11.

**Regarding claims 25 and 26**, Barton discloses wherein the parameters of the trainer are task related. See col. 5: 23-33.



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**Regarding claims 33-35**, Barton discloses wherein the trainer is used for various sports including basketball and any sport involving timing and tempo. See col. 5: 23-33. Note that throwing a baseball is related to an interaction with a team.

**Regarding claim 36**, Barton discloses wherein the training system characterizes the user. See col. 4: 1-11.

**Regarding claim 37-41**, Barton discloses wherein the skills trained for are related to various sport game tasks, including baseball (perception of motion in a swing), and basketball (perception of a free teammate and shooting, as well as tactics).

**Regarding claims 42-44**, Barton discloses wherein trainer breaks the tasks into a series of cognitive skills and actions related thereto. See col. 5: 33-40.

**Regarding claims 46-47**, Barton discloses wherein the system comprises an editor for developing and generating stimuli. See col. 4: 1-11.

**Regarding claim 48 and 52**, Barton discloses a method for teaching a subject a control process in a task, wherein the task is decomposed into a plurality of cognitive skill related to the control process. See col. 4: 1-11 and col. 5: 23-33. Barton further discloses wherein a trainer is constructed (a song) by computer software programs. See col. 5: 3-15. Listening to a song does not require fidelity to the task, and the training of timing is an executive process in that it teaches reaction, reaction inhibition, etc.

**Regarding claim 49**, Barton discloses a method for teaching a subject a control process in a task, wherein the task is decomposed into a plurality of cognitive skill related to the control process. See col. 4: 1-11 and col. 5: 23-33. Barton further discloses wherein a trainer is constructed (a song) by computer software programs. See col. 5: 3-15. Listening to a song does



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not require fidelity to the task, and the training of timing is an executive process in that it teaches reaction, reaction inhibition, etc. Barton also discloses wherein the system performs the analysis at least partly automatically. See col. 4: 38-50.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of the relevant portion of 35 U.S.C. 103 that forms the basis for the rejections made in this section of the office action;

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

**Claims 8-9, 16-17, 21-22, 28-29, 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton (US 6,746,247) in combination with Cantor (US 7,165,793).**

**Regarding claims 8-9,** Barton discloses all features as described with respect to claims 1 and 5-7, but does not teach wherein the actions are iteratively adjusted, or wherein they pertain to heuristic parameters. However, Cantor discloses a system for cognitive analysis that involves analyzing a user's performance pertaining to executive and control processes in relation to a job task, and wherein the process is adjusted based upon the user's performance regarding heuristic parameters. See col. 4: 14-36 and col. 6: 43-60. It would have been obvious to include this concept in other systems as well, because the concept is well established, and no unexpected result would ensue from transferring this concept to other systems such as Barton.

**Regarding claims 16-17, 21-22, 28-29, and 50-51,** Barton discloses all of the features as described above with regard to claims 1-13, with the exception of wherein the user interacts with



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the system process via inputs and the process is iteratively adjusted in response to these interactions. However, this is disclosed by Cantor in col. 6: 43-60. It would have been obvious to include this adjustment concept in other cognitive training systems as well, because the concept is well established, and no unexpected result would ensue from transferring this concept to other systems such as Barton, as it would be an improvement in a manner already established in the art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY MUSSELMAN whose telephone number is (571)272-1814. The examiner can normally be reached on Mon-Thu 6:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571)272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. M./  
Examiner of Art Unit 3715

/XUAN M. THAI/  
Supervisory Patent Examiner, Art Unit 3715